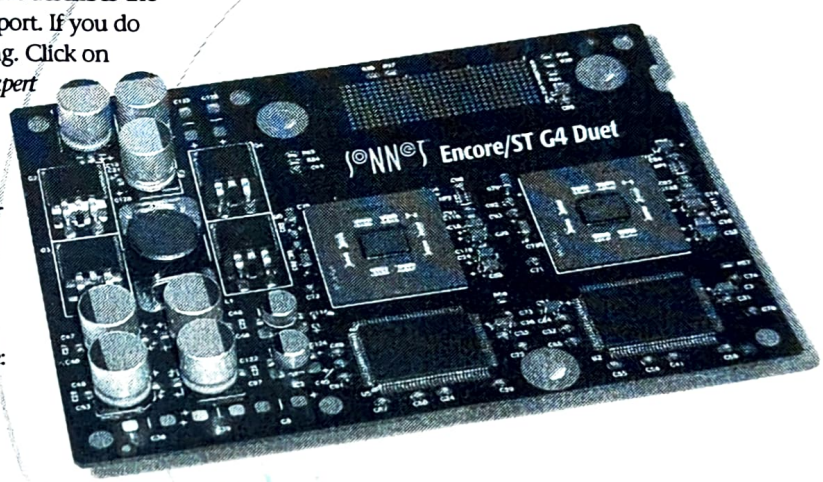
ENCORE™/ST G4 DUET™

Dual Processor Upgrade Card for Power Macintosh® G4 AGP Graphics

Quick Start Guide for Encore/ST G4 Duet

Power Mac and Operating System Compatibility

The Encore/ST G4 Duet processor upgrade card is compatible *only* with Power Mac G4 AGP Graphics and Gigabit Ethernet models; do not attempt to install this product into PCI Graphics, or Digital Audio models. If you are unsure which Power Mac model you have, you may refer to the Apple article that describes the differences. Log on to the Internet and type www.apple.com/support. If you do not already have Apple ID, you must create one before proceeding. Click on Knowledge Base (Expert). When the *AppleCare Knowledge Base: Expert Search* window appears, click the radio button next to Article Number, type 58418, then click Continue to view the article.



At this printing, the Encore/ST G4 Duet processor upgrade is compatible with Mac OS 8.6 through OS X version 10.0.4. For up-to-date Mac OS compatibility, check our web site.

You Should Have

The following items should be included in your product package:

- *Encore/ST G4 Duet processor upgrade card*
- *Heatsink adapter*

The following items are required for installation:

- Medium Phillips screwdriver
- Needle-nose pliers

Support Note: Please familiarize yourself with the following instructions before beginning the installation. If you feel you are unable to install the computer hardware, please contact a qualified computer technician.

Before proceeding with the installation, we recommend that you make a backup of important information on your hard drive prior to installing new hardware or software.

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Support Note: When handling computer products, take care to prevent components from being damaged by static electricity; avoid working in carpeted areas. Handle processor upgrade cards only by their edges and avoid touching connector traces and component pins.

Shut Down and Open Computer

1. Shut down your Power Mac. If the computer has been on for any length of time, wait a few minutes for it to cool before beginning the installation.

2. Touch a port access cover on the back of the computer (**Figure 1**) to discharge any potential damaging static electricity.

Support Note: To avoid regenerating a static charge in your body, do not walk around the room until after you finish installing the Encore card and close the computer.

3. Disconnect the power cable. If you need to move the computer to work to a different area where you can freely work, disconnect the peripheral cables.

4. Locate the security lock at the back of the computer (**Figure 2**). If it is not already pressed in, do so now.

5. With the right side of the case facing you, open your Power Mac by lifting the release latch and lowering the side panel away from the computer's case (**Figure 3**).

Remove Heatsink

Locate the processor heatsink on the logic board (**Figure 4**). Grasp one of the clips securing the heatsink with needle-nose pliers, between the heatsink and processor card. Pull down and away to unhook one side of the clip from the processor card (**Figure 4**). Push the clip away from you to unhook it from the other side. Repeat these steps with the other clip. Once the clips have been unhooked, gently lift the heatsink and clips away from the processor and set them aside, but not on the logic board.

Remove Processor Card

Remove the three screws securing the processor card to the logic board (**Figure 5**). Grasping the processor card by its edges, carefully lift it straight up and away from the logic board.

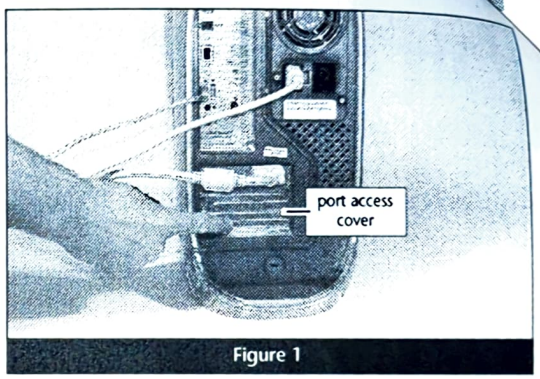
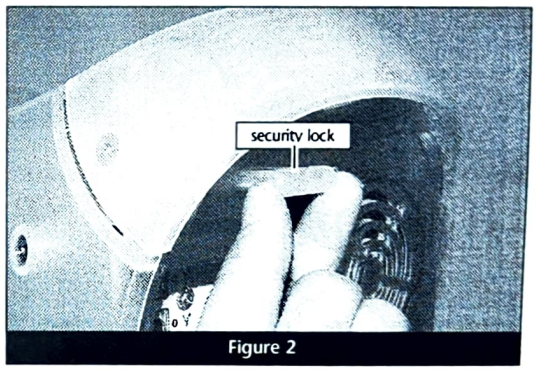


Figure 1



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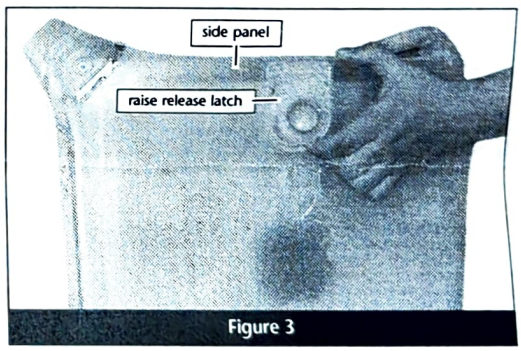

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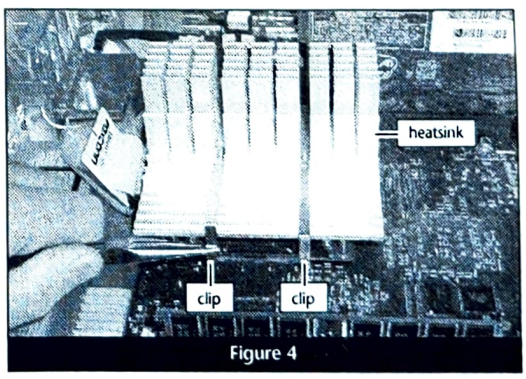

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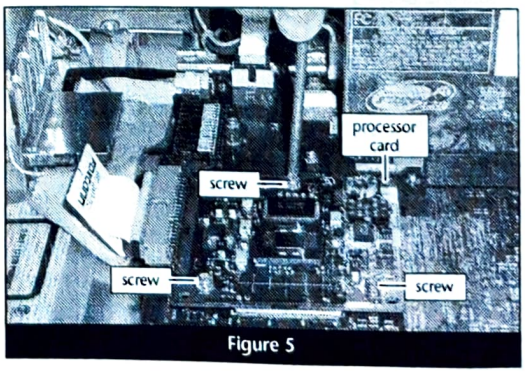


Figure 5

Install Encore/ST G4 Duet Processor Upgrade Card

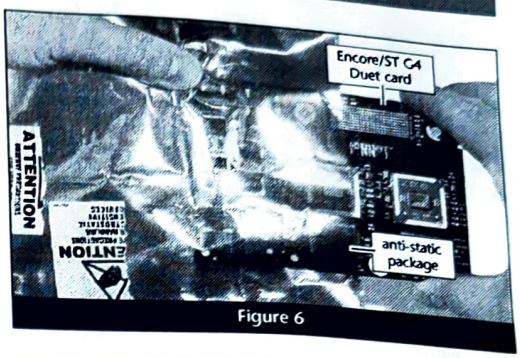
1. Remove the Encore processor upgrade card from the anti-static package, making sure to handle the card by the edges (**Figure 6**). Place the processor card you removed from the computer into the anti-static package and store it in a safe place.

2. Hold the Encore card with the connector facing up (**Figure 7**). Carefully remove the cap covering the connector; place the cap on the original processor card's connector.

3. Turn the Encore card over and hold it so the Sonnet logo appears upside down; note the location of the three screw holes and the connector (**Figure 8**).

4. Align the Encore card's three screw holes with the three threaded posts on the logic board, then set the card gently on top of the posts (**Figure 9**). Verify the connectors are lined up, then, grasping the card by its edges, gently press it straight down until the connectors are completely coupled.

5. Secure the Encore card to the logic board with the three screws you removed previously; *do not overtighten the screws* (**Figure 10**).



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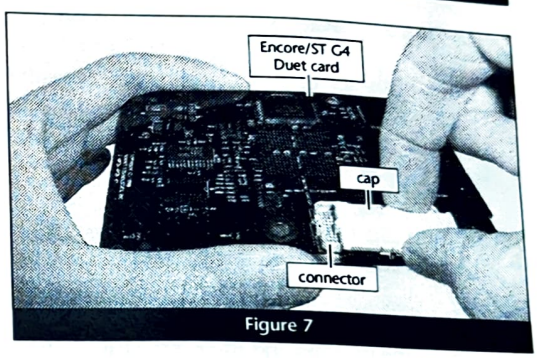

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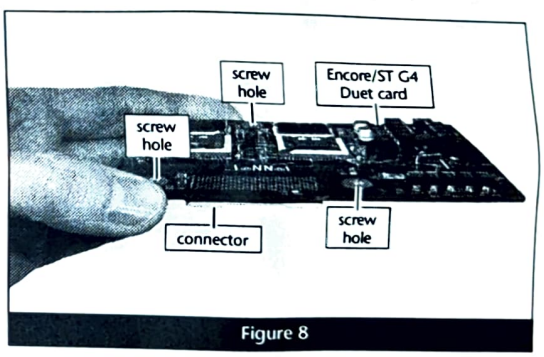

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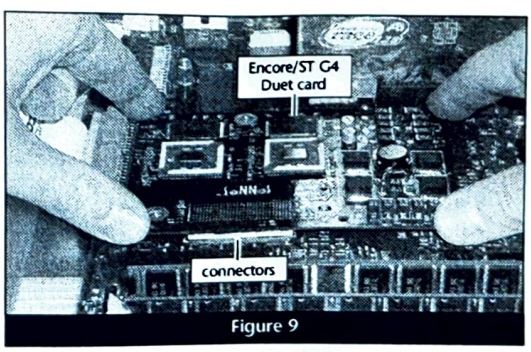

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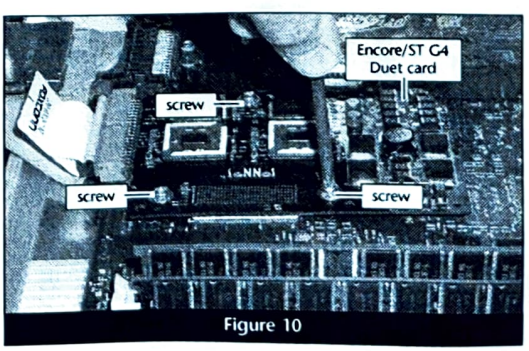


Figure 10

Quick Start Guide for Encore/ST Duet

Place Heatsink Onto Heatsink Adapter

Hold the heatsink adapter so the large piece of thermal pad material is face up and the holes are on the left (**Figure 11**). Hold the heatsink with the short fins closest to you, and then guide the heatsink's two left posts through the holes in the left edge of the heatsink adapter.

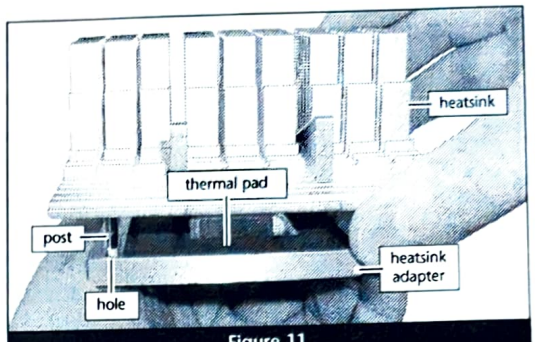
Reattach Heatsink

1. Make sure the heatsink clips are positioned properly on the heatsink (**Figure 12**). Examine the clips and note the short and long sections, and the dimple. Place each clip on the heatsink so its short section and dimple rests in the tall fin area.

2. Grasp the heatsink and heatsink adapter together. With the tall fins at the back, guide the heatsink's posts into the holes on the Encore card; make sure the clips do not get caught between (**Figure 13**). Verify that the heatsink rests flat on top of the heatsink adapter.

3. Lift up a clip and hook it over the back of the Encore card, then pull it toward you (**Figure 14**). Repeat this process with the other clip.

4. Grasp a clip with needle-nose pliers, then pull it toward you and over the front of the heatsink and the Encore card (**Figure 15**). Repeat this process with the other clip.



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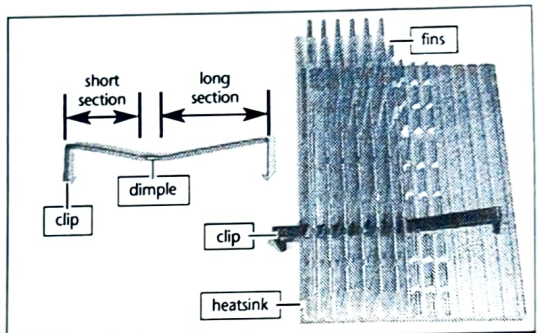

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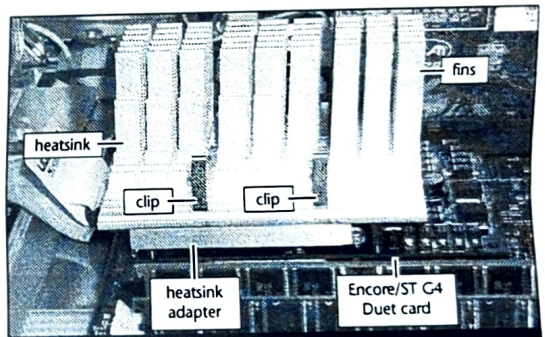

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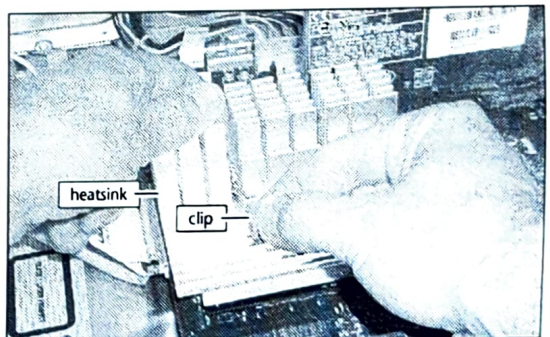

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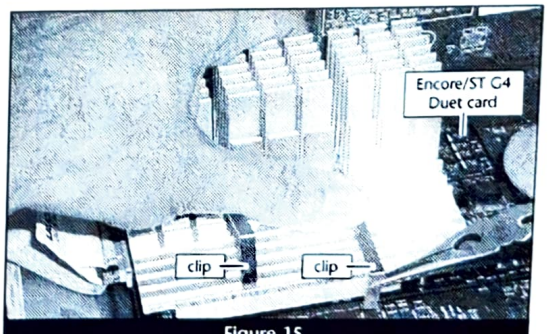

Figure 15

Support Note: Your Power Macintosh was designed to operate efficiently with the side panel closed. **Do not operate your computer with the side panel open;** proper air flow over the heatsink will not occur and the processor may overheat.

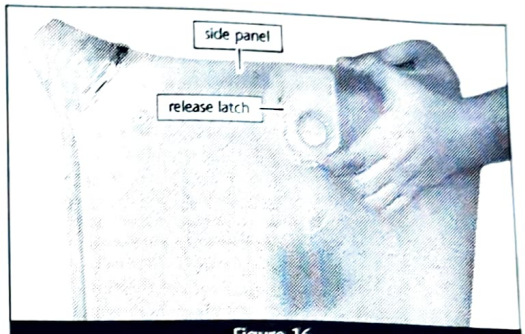

Figure 16

Close Computer

1. Raise the side panel back into place (**Figure 16**).

2. Return the computer to your computing area and reconnect the power and peripheral cables to the computer.

Turn On Computer

Turn on your Power Mac. Your accelerated machine should boot normally.